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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/820,124	04/08/2004	Shenshen Wu	20002.0331	8652

7590 09/01/2005

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EXAMINER

BUTTNER, DAVID J

ART UNIT	PAPER NUMBER
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1712

DATE MAILED: 09/01/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/820,124

Applicant(s)

WU ET AL.

Examiner

David Buttner

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-28 is/are pending in the application.
- 4a) Of the above claim(s) 14-28 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☒ Claim(s) 1-28 are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

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Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-13, drawn to a golf ball, classified in class 473, subclass 378.
- II. Claims 14-19, drawn to a polyurea, classified in class 528, subclass 61.
- III. Claims 20-28, drawn to a polyurethane, classified in class 528, subclass

60.

Inventions II/III and I are related as mutually exclusive species in an intermediate-final product relationship. Distinctness is proven for claims in this relationship if the intermediate product is useful to make other than the final product (MPEP § 806.04(b), 3rd paragraph), and the species are patentably distinct (MPEP § 806.04(h)). In the instant case, the intermediate product is deemed to be useful as a general purpose molding resin for objects such as automobile bumpers, wheels, etc instead of golf balls and the inventions are deemed patentably distinct since there is nothing on this record to show them to be obvious variants. Furthermore the composition claims (#14-28) require prepolymers of ureas or urethanes while the golf ball claims do not. Additionally, the golf ball claims require its material to exhibit a certain COR vs temp profile while the composition claims do not. Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions anticipated by the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Inventions II and III are unrelated. Inventions are unrelated if it can be shown that they are not disclosed as capable of use together and they have different modes of operation, different functions, or different effects (MPEP § 806.04, MPEP § 808.01). In the instant case the different inventions are directed to different species of polymers.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art because of their recognized divergent subject matter, restriction for examination purposes as indicated is proper.

During a telephone conversation with Stephanie Scruggs on 8/26/05 a provisional election was made with traverse to prosecute the invention of I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-28 withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1-4 and 8-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Dusbiber '061.

Dusbiber claims (#6) golf balls of diisocyanate/diol prepolymer, cured with a trifunctional polyol. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

Claims 1-4 and 8-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Peter '313.

Peter exemplifies (#6) golf ball covers of diisocyanate/triol prepolymer, cured with diamine. The prepolymer can be considered a trifunctional isocyanate because each of the three arms is terminated by a –NCO group. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

Claims 1-3 and 8-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Watabe '573.

Watanabe exemplifies (#4) a prepolymer from a polyether triol and diisocyanate, cured with additional polyether triol. The polyurethane is useful in golf ball cores (col 4 line 36). Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

Claims 1-3,6 and 8-13 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Crast '012.

Crast exemplifies (table 2) golf ball coatings utilizing isocyanurate trimers of toluene diisocyanate. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

Claims 1-3,6 and 8-13 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Kennedy '220.

Kennedy claims (#5) golf ball coatings utilizing trimers of hexamethylene diisocyanate. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

Claims 1-4 and 8-12 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wu '870.

Wu teaches polyurea covers for golf balls. The polyurea can be formed from triisocyanates (col 2 line 45). The isocyanates can be reacted with trifunctional amines (col 3 line 33). Use of either trifunctional monomer would produce the necessary COR vs temp profile.

Claims 1-13 rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wu '176.

Wu teaches polyurethane covers for golf balls. The urethane can be based on triisocyanate of HDI (ie isocyanurate trimer of HDI, col 5 line 23) and triamines such as diethylene triamine (col 5 line 49). Use of either trifunctional monomer would produce the necessary COR vs temp profile.

Claims 1-13 rejected under 35 U.S.C. 102(a,e) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Wu 2003/0096936.

Wu claims golf ball covers of polyurea prepolymer and curing agent (claim 1). Many of the isocyanates are trifunctional including triisocyanurate of HDI (claim 3). Many of the amines are trifunctional (claim 6). The curing agent can be trifunctional such as diethylene triamine (claim 12). Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-13 rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-27 of U.S. Patent No. 6835794. Although the conflicting claims are not identical, they are not patentably distinct from each other because the patent also claims polyurea covers for golf balls that are derived from trifunctional monomers. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same

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materials appear to be used including triisocyanate of HDI (claim 1) and diethylene triamine curing agent (claim 7).

Claims 1-13 provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-18 of copending Application No. 10-820122. Although the conflicting claims are not identical, they are not patentably distinct from each other because the copending application also claims golf balls and compositions of polyurethanes and polyureas derived from trifunctional monomers. Presumably, the reference material would inherently have the same COR vs temp profile as the instant claims because the same materials appear to be used.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Weber '943 and JP09104733 are cited as being relevant to nonelected claims 20-28.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to David Buttner whose telephone number is 571-272-1084. The examiner can normally be reached on weekdays from 10 to 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Randy Gulakowski, can be reached on 571-272-1302. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.



Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

David Buttner

8/26/05

DAVID J. BUTTNER  
PRIMARY EXAMINER

A handwritten signature in black ink, appearing to read "David Buttner", written in a cursive style.